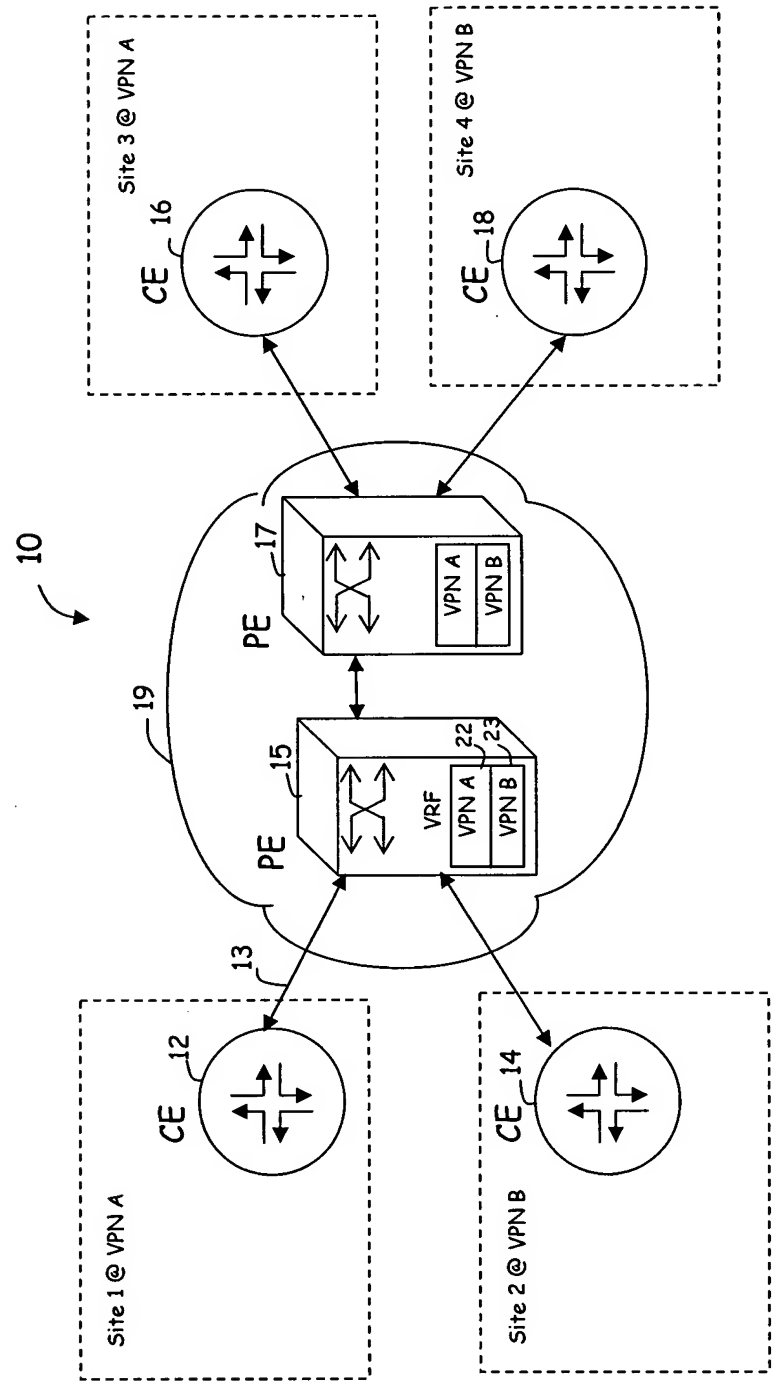
10
Site 3 @ VPN A
CE
16
Site 4 @ VPN B
CE
18
PE
17
VPN A
VPN B
19
PE
15
VRF
22
23
VPN A
VPN B
13
Site 1 @ VPN A
CE
12
Site 2 @ VPN B
CE
14

Figure 1

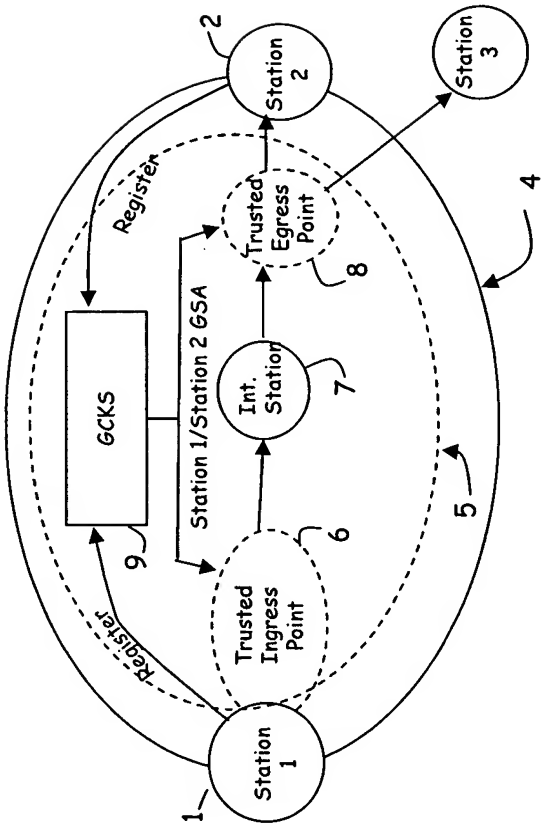
Station 1
Station 2
Station 3
Trusted Ingress Point
Trusted Egress Point
Int. Station
GCKS
Register
Register
Station 1/Station 2 GSA
1
2
4
5
6
7
8
9

Figure 2

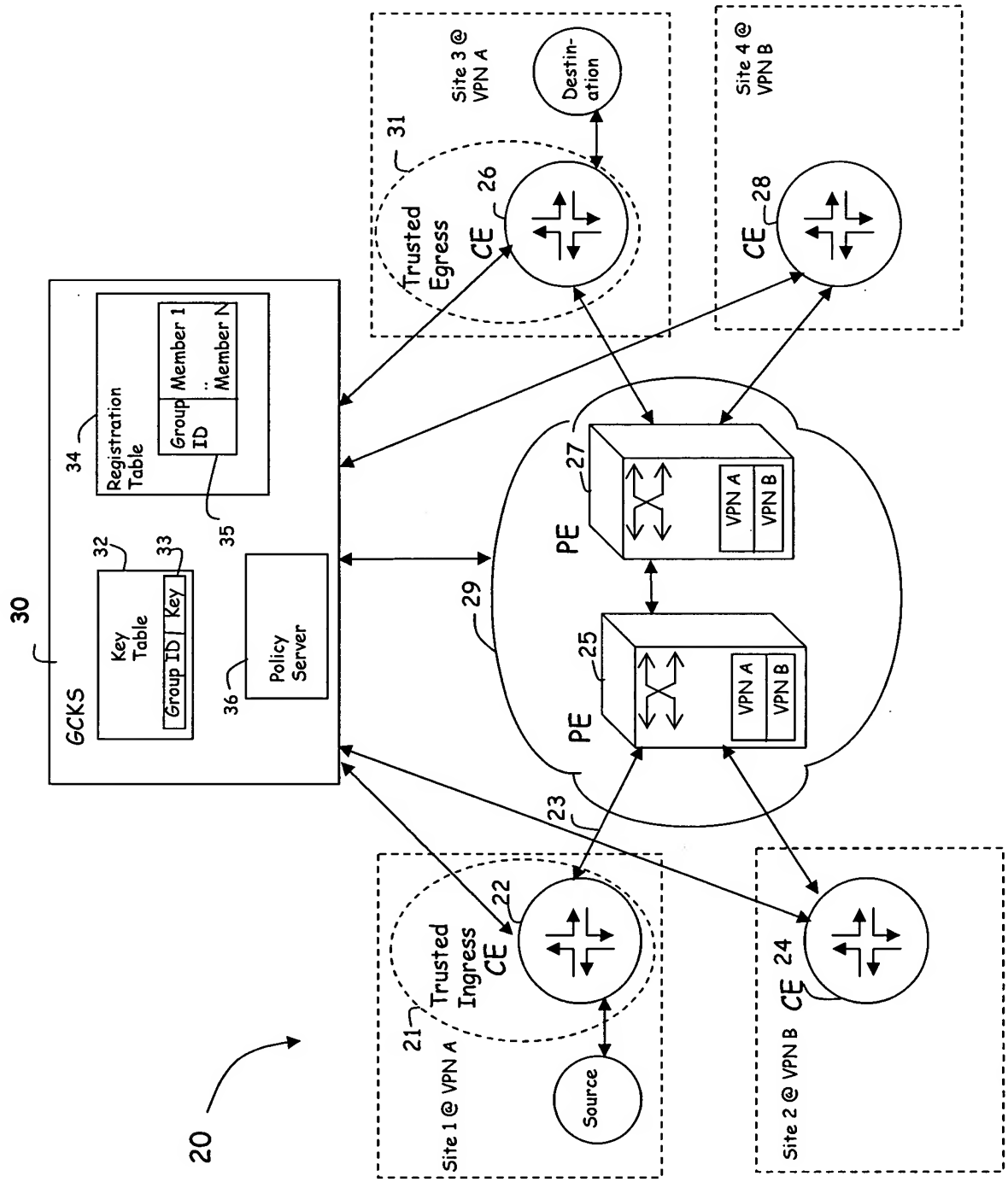
20
30
GCKS
Key Table
Group ID
Key
32
33
Registration Table
Group ID
Member 1
Member N
34
35
Policy Server
36
Site 1 @ VPN A
Trusted Ingress CE
21
22
Source
Site 2 @ VPN B
CE
24
23
PE
25
VPN A
VPN B
27
29
Site 3 @ VPN A
Trusted Egress CE
31
26
Destin-ation
Site 4 @ VPN B
CE
28

Figure 3

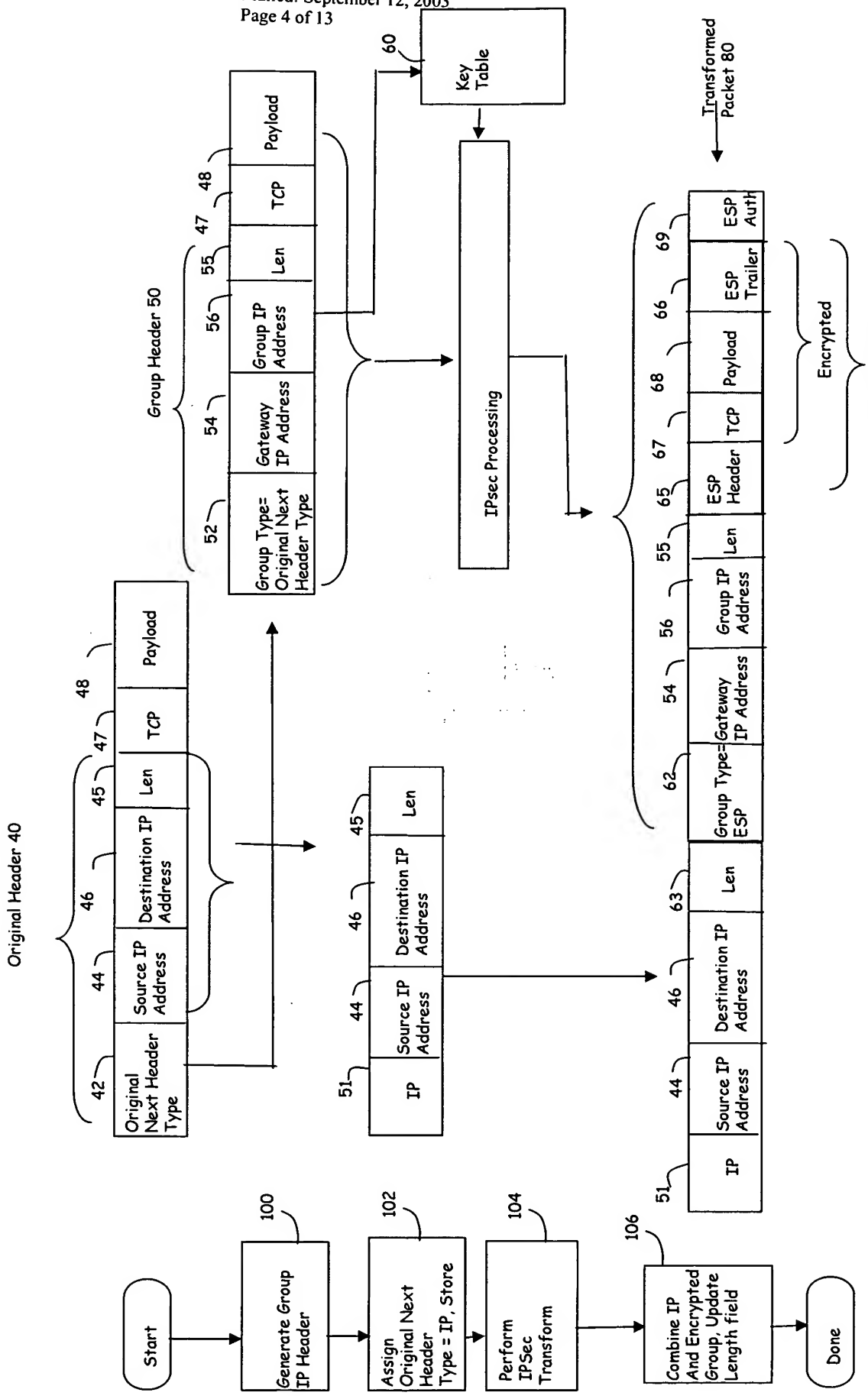

Figure 4A

Figure 4B

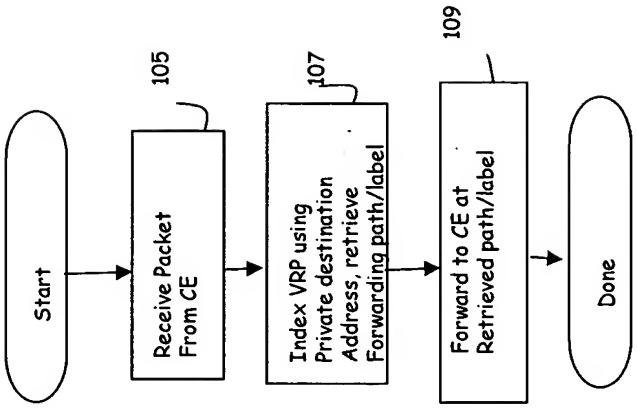
Start
Receive Packet From CE
105
Index VRP using Private destination Address, retrieve Forwarding path/label
107
Forward to CE at Retrieved path/label
109
Done

Figure 5

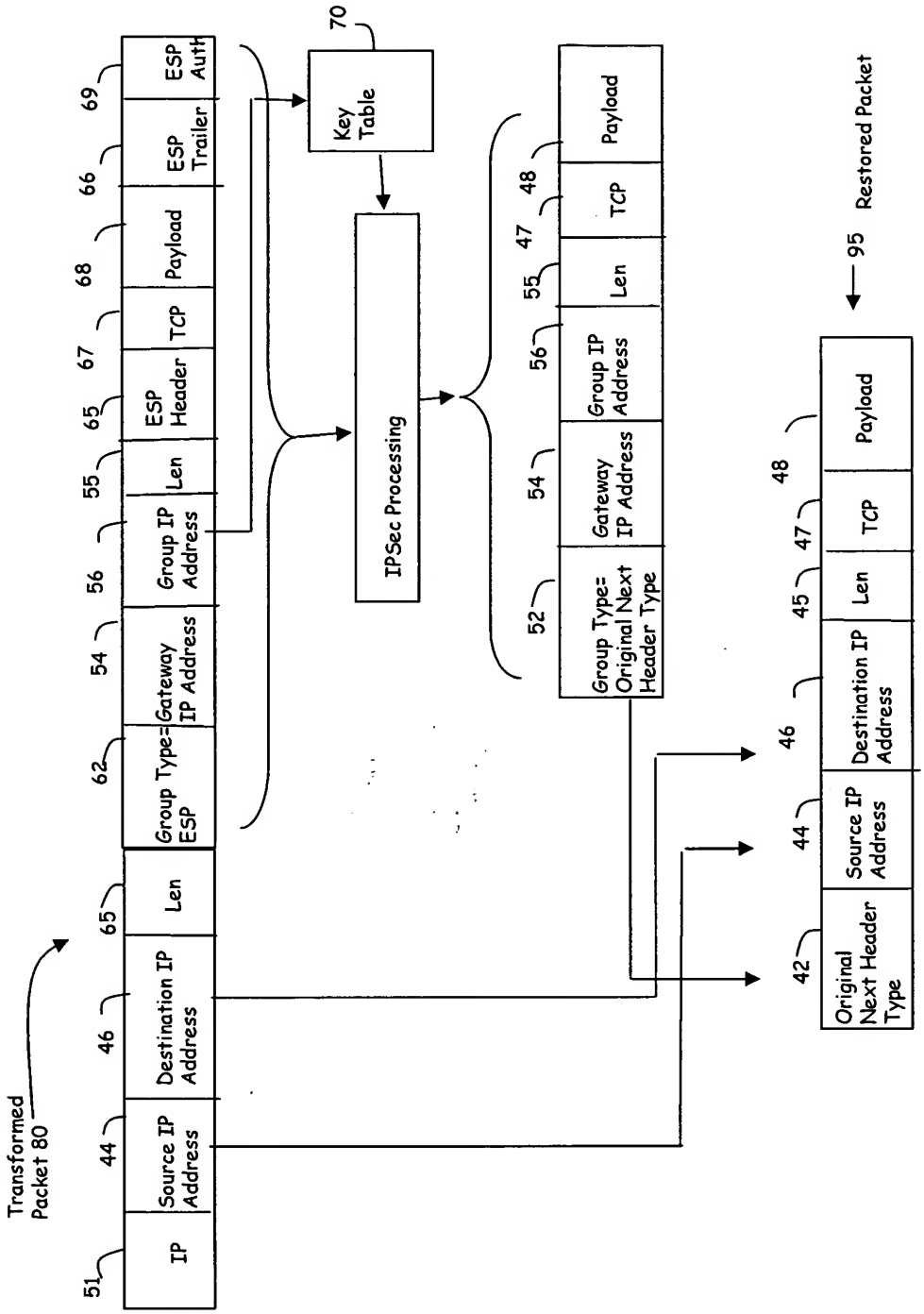

Figure 6B

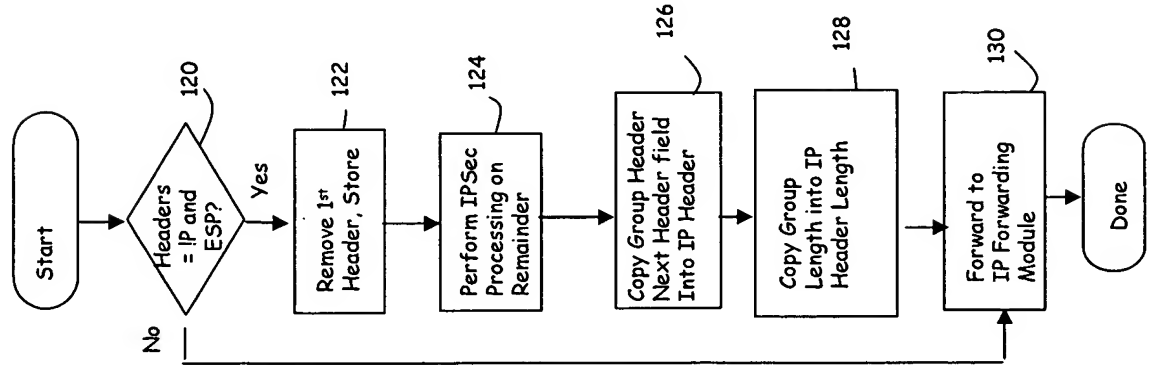

Figure 6A

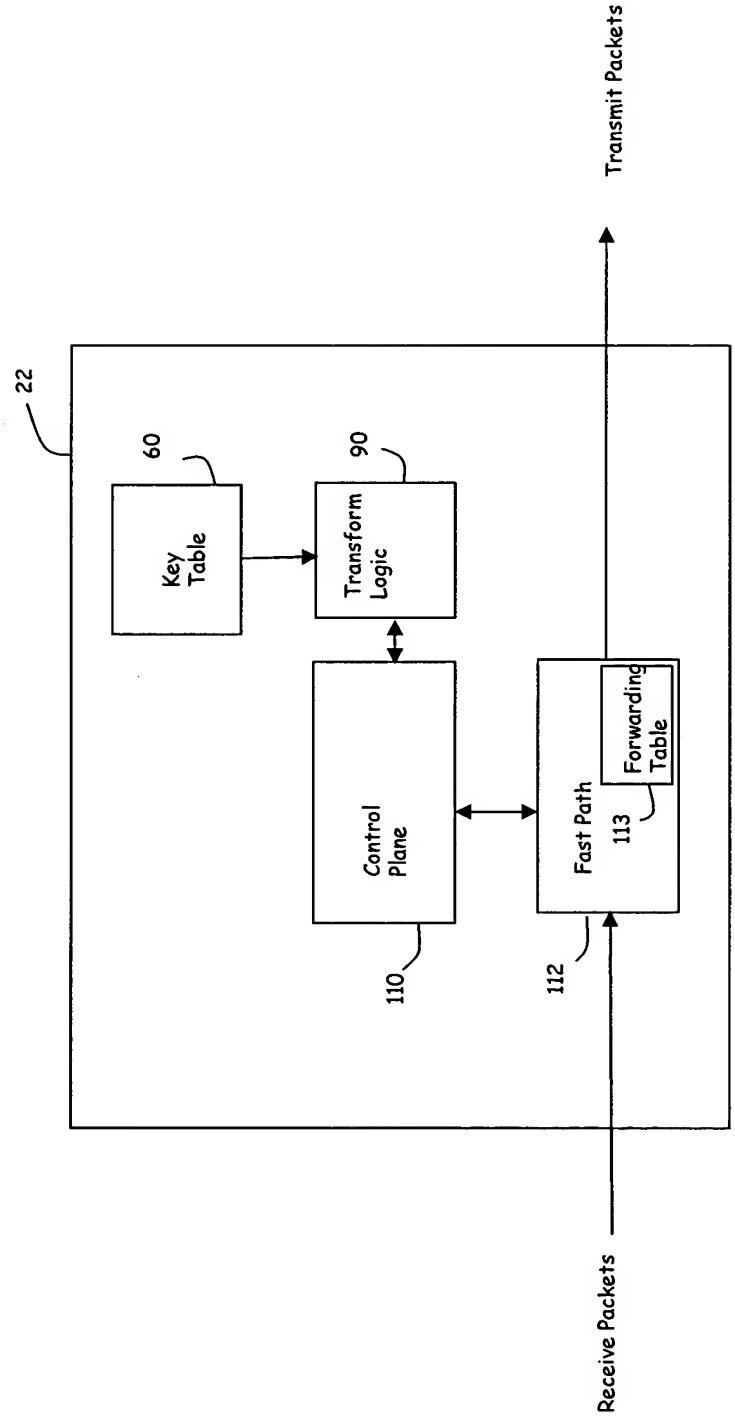
Transmit Packets
22
60
Key Table
90
Transform Logic
Control Plane
110
Fast Path
113
Forwarding Table
112
Receive Packets

Figure 7

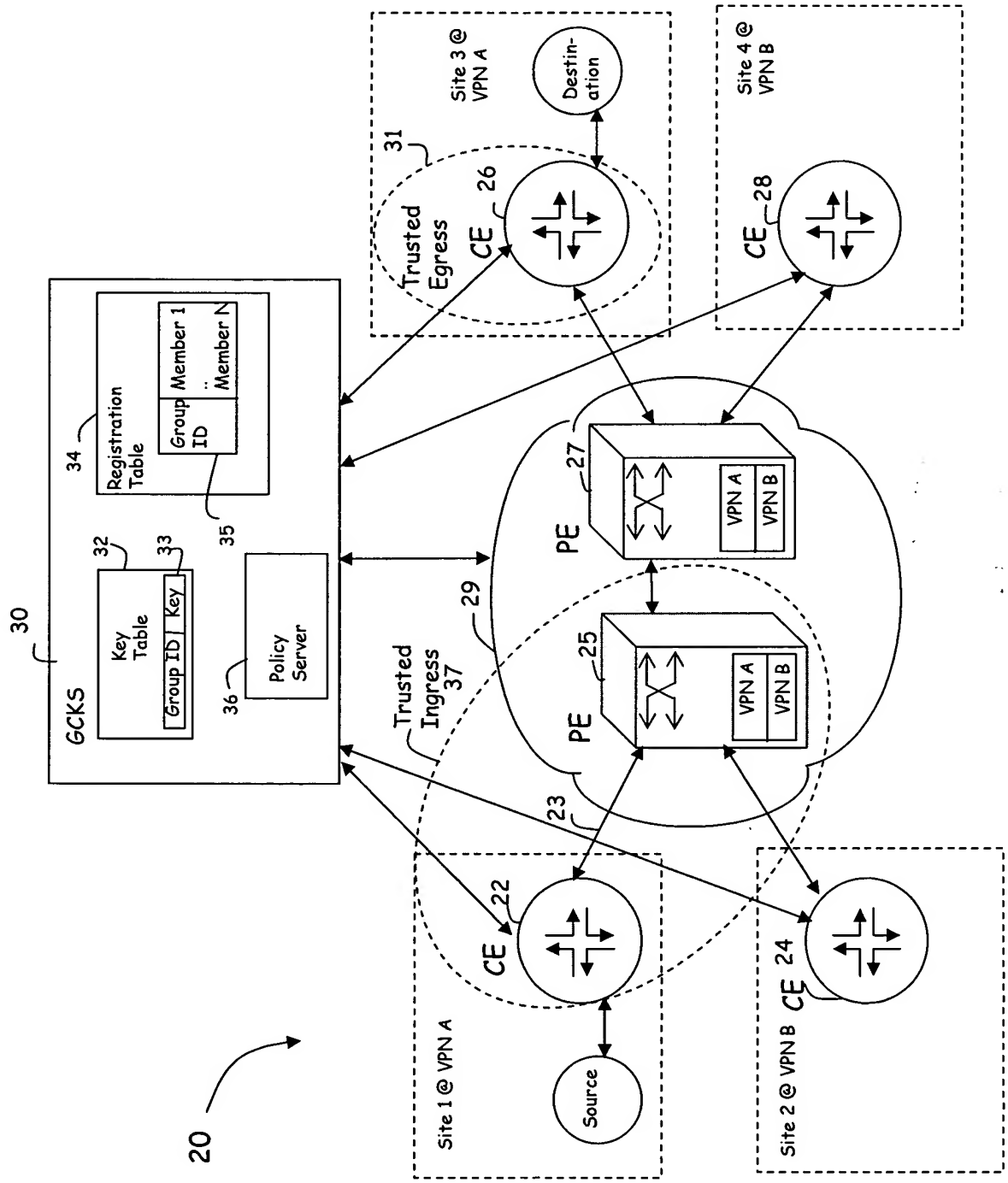
20
30
GCKS
Registration Table
34
Group ID
Member 1
Member N
35
Key Table
32
Group ID
Key
33
Policy Server
36
Site 1 @ VPN A
Source
22
CE
Site 2 @ VPN B
24
CE
23
Trusted Ingress
37
29
PE
25
VPN A
VPN B
PE
27
VPN A
VPN B
Site 3 @ VPN A
Destin-ation
31
Trusted Egress
CE
26
Site 4 @ VPN B
CE
28

Figure 8

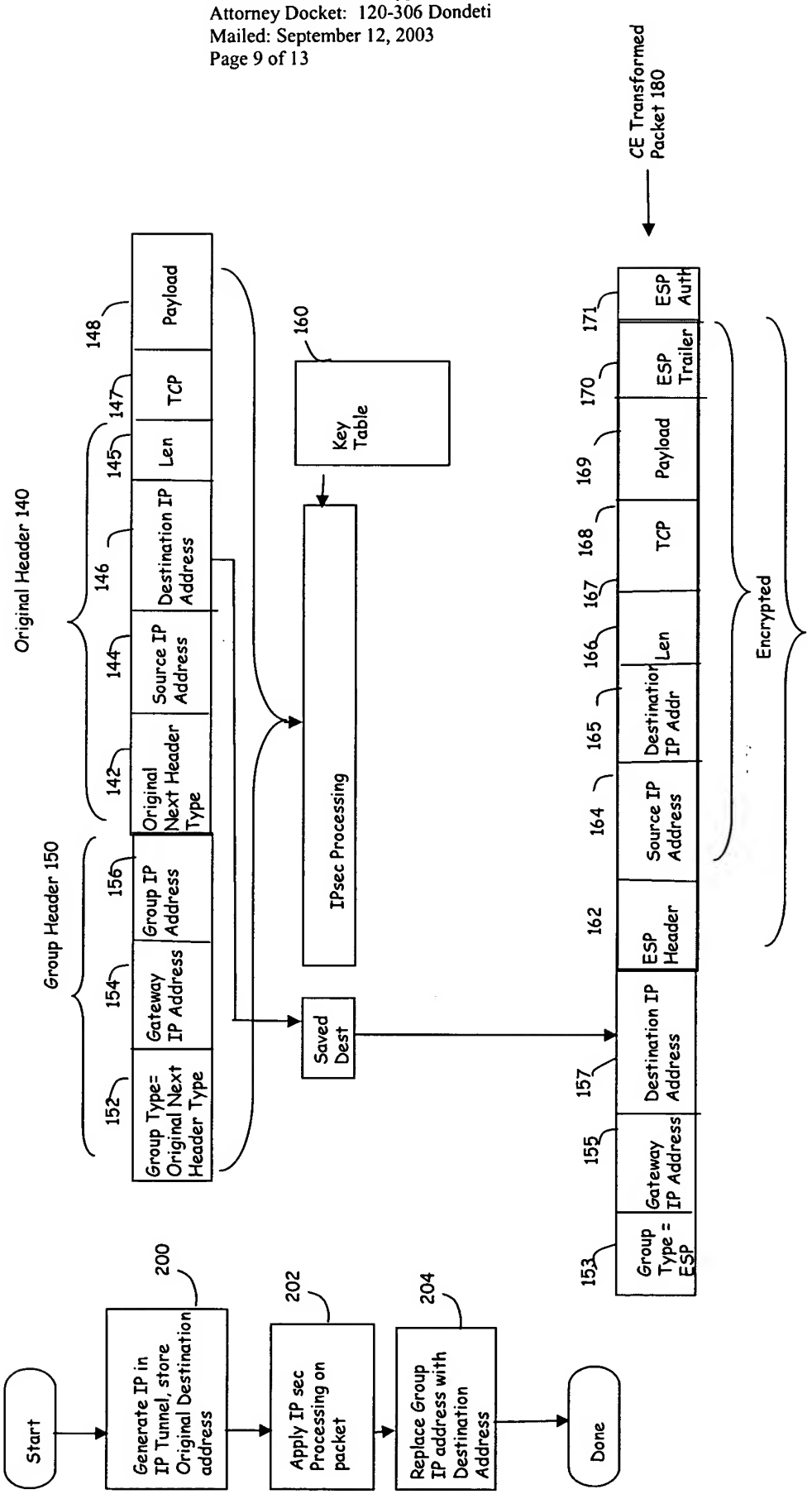

Figure 9A

Figure 9B

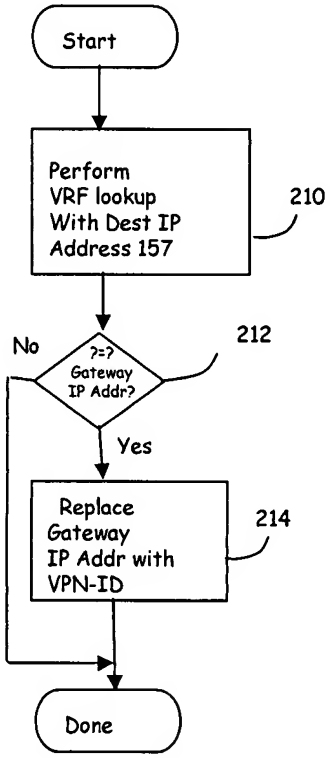

Figure 10A

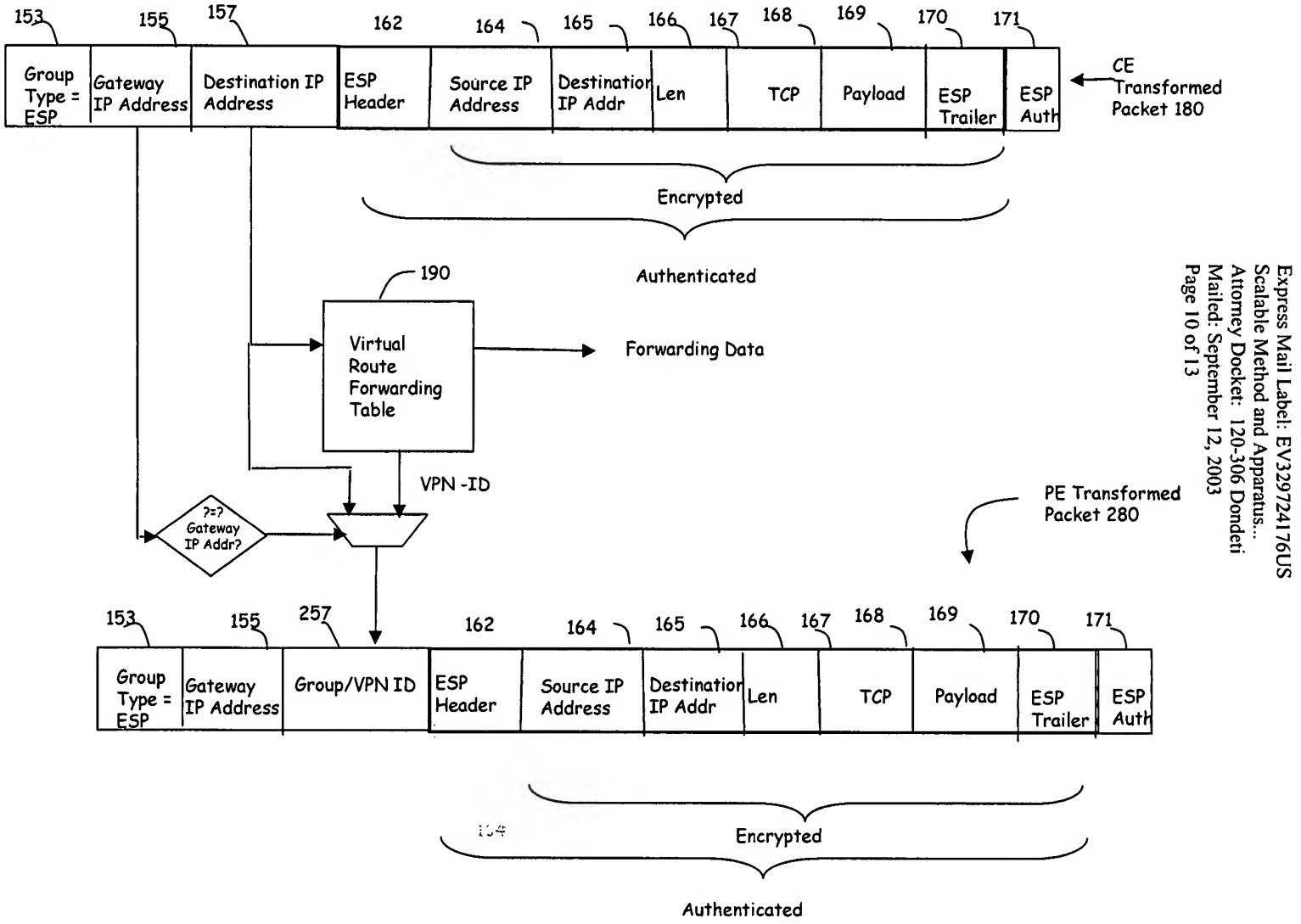

Figure 10B

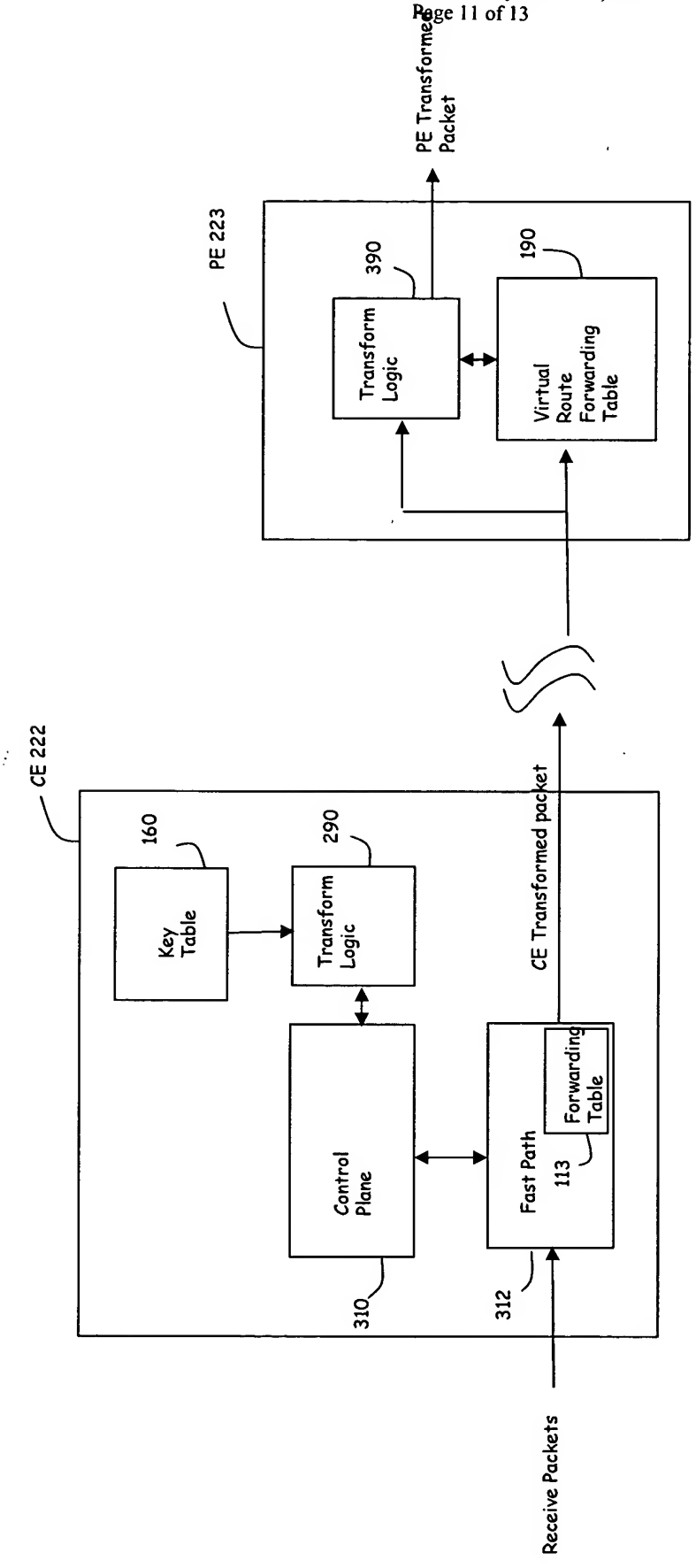
PE Transformed Packet
PE 223
390
Transform Logic
190
Virtual Route Forwarding Table
CE 222
160
Key Table
290
Transform Logic
CE Transformed packet
Control Plane
Fast Path
Forwarding Table
113
310
312
Receive Packets

Figure 11

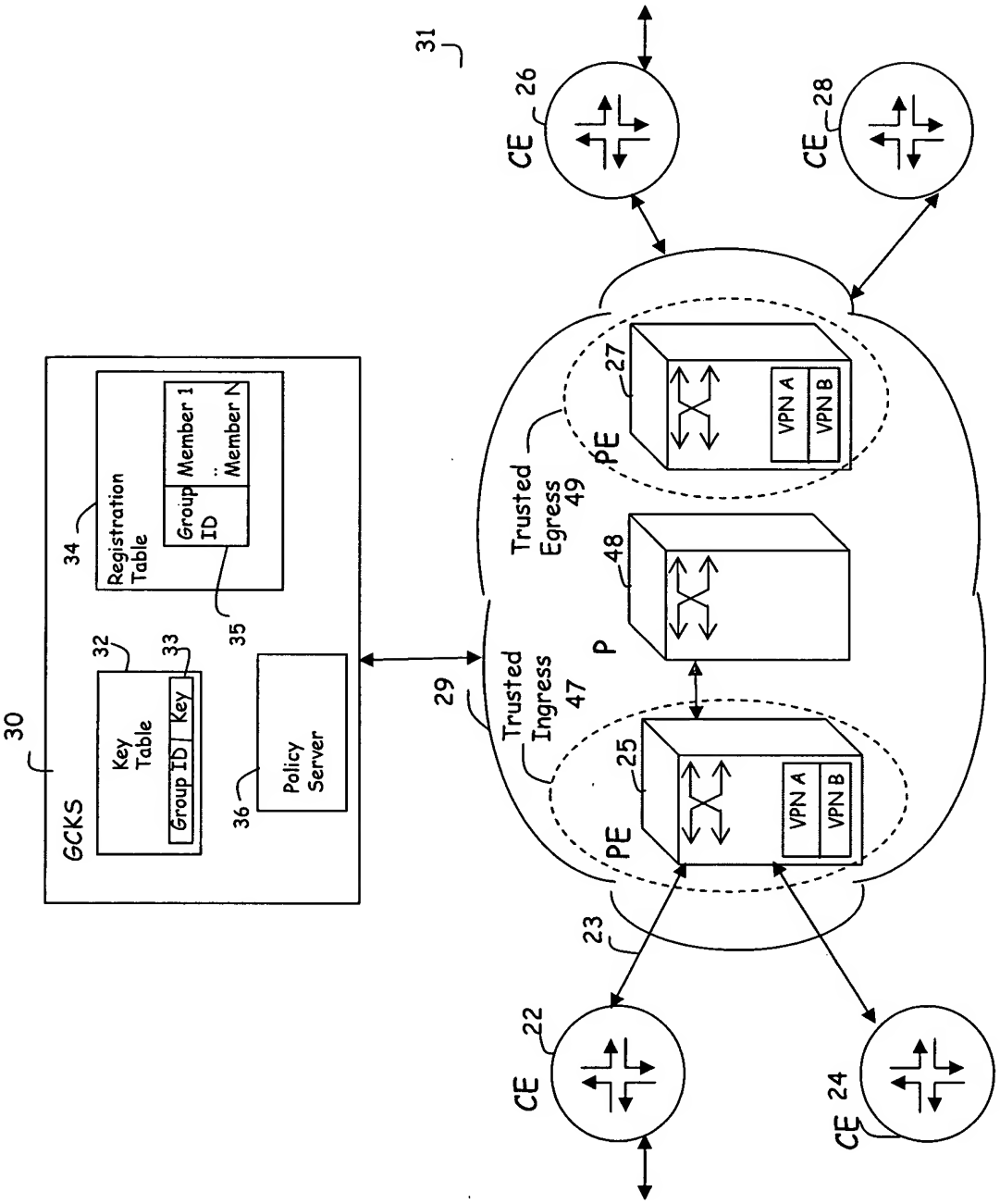
31
CE 26
CE 28
27
PE
VPN A
VPN B
Trusted Egress 49
48
P
Trusted Ingress 47
29
25
PE
VPN A
VPN B
23
CE 22
CE 24
30
GCKS
Registration Table
34
Group ID
Member 1
Member N
35
Key Table
32
Group ID
Key
33
Policy Server
36

Figure 12

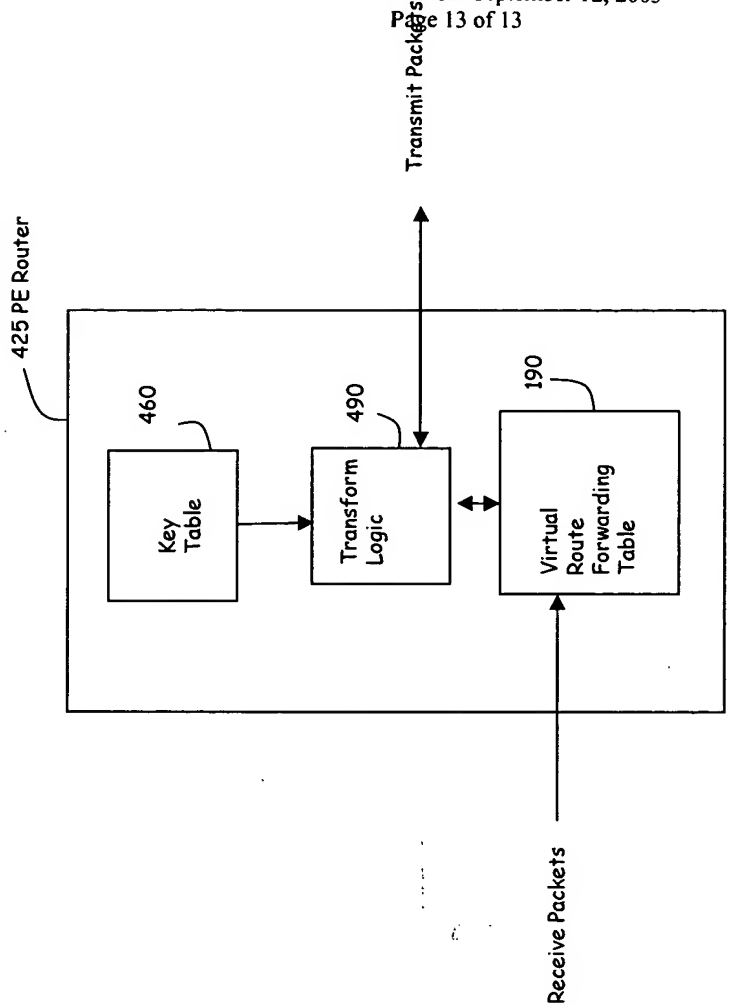

Figure 14

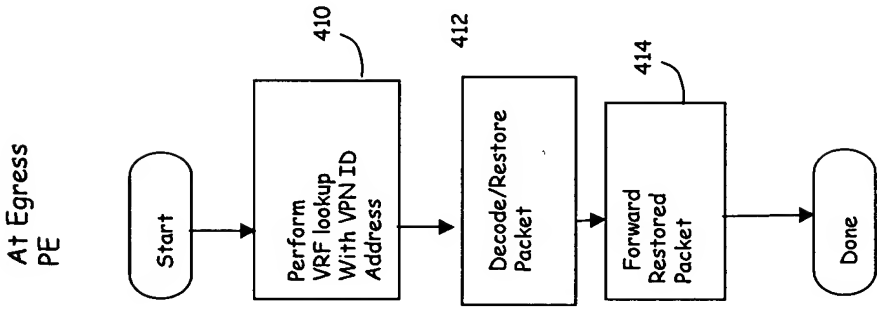

Figure 13A

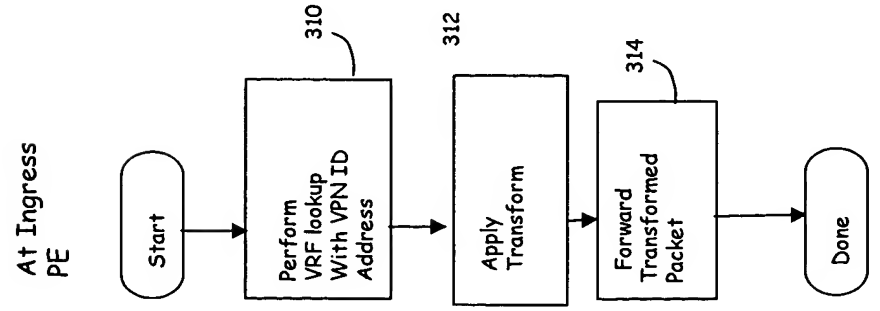

Figure 13A